



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF WASTE AND HAZARDOUS SUBSTANCES
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SITE INVESTIGATION &
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April 25, 2013

Mr. Steve Baggett
Stantec
102 Pickering Way Suite 200
Exton PA 19341

**RE: Status Update – Supplemental FFS
Amtrak Wilmington Former Fueling Facility (DE-0266)**

Dear Mr. Baggett:

The EPA and DNREC have prepared this letter in response to the referenced Status Update dated March 21, 2013. One of Stantec's primary goals in preparing the Supplemental Focused Feasibility Study Report is to evaluate DNREC's remedial expectation for the Eastern Drainage Ditch (EDD) sediments. DNREC and EPA believe that decisions concerning remediation of the EDD are likely to be a key driver for the type and extent of remediation that will be needed for the upland source areas (e.g., upland soils). We also believe that whatever remediation ultimately gets implemented for the EDD will have a direct effect on the magnitude of off-site release to the tidal Brandywine. This in turn has implications for Amtrak's NPDES permit, including implementation of the PCB Pollutant Minimization Plan (PMP).

During the March 15, 2012 meeting between DNREC, EPA, Amtrak, and Stantec, DNREC identified a remedial goal of 1 part per million (ppm) of PCBs for surficial and bank sediments in the EDD. This concentration was determined through extensive analysis of site data to represent a concentration that, if not exceeded in the surficial sediments, would be protective to both benthic aquatic life in the EDD and to wildlife receptors (namely the belted kingfisher) who consume small fish that reside in the EDD. DNREC further expects that the remediation and maintenance of the EDD sediments to a PCB concentration of 1 ppm is consistent with the DRBC PMP Rules to achieve the maximum practical reduction of PCB released to surface waters.

The other important point we would like to reiterate from the March 15, 2012 meeting is that DNREC believes the functionality of the EDD as a stormwater management system will decline over time as solids continue to accumulate. Although the EDD has clearly captured a significant amount of contamination over the years, data indicate that releases from the EDD continue to occur under both wet and dry conditions and that those releases are sufficient, without consideration of any other sources, to cause exceedances of applicable water quality criteria in the tidal Brandywine. Again, DNREC and EPA believe that decisions concerning the EDD are

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the driver for making decisions on the upland portions of the site with direct effects on the off-site transport of contaminants.

Based on the criteria describe above, DNREC and EPA offer the following specific comments to the March 21, 2013 Status Update to the Supplemental FFS:

1. The agencies reinstated their position that a certain amount of mass removal and off-site disposal is appropriate as a source control remedy in the EDD.
2. Given the massive amount of PCB and petroleum contamination that exists in the EDD, the agencies have concerns of using solidification/stabilization (S/S) and/or AquaBlok for the EDD sediments as stand alone remedies. These alternatives, however, may be more effective if used as a complementary remedies with mass removal.
 - a. If proposed as a stand alone remedy, solidification/stabilization (S/S) must demonstrate to be as equally protective as excavation. The agencies, however, are concerned that the effectiveness of S/S may be limited by the high levels and mass of PCB and DRO in the EDD sediments and that its long term performance may be compromised. To that end, the proposed performance specification of 20 psi for treatability testing needs support documentation . A typical S/S performance criterion for compressive strength is 50 psi. In addition, acceptable performance criteria for S/S must include hydraulic conductivity and leachability and these will be a requirement for further consideration of S/S as a remedy at the site.
 - b. An AquaBlock cap may be a suitable technology to address any residual contamination remaining in the EDD after excavation and also to eliminate potential recontamination of newly deposited material from remediated uplands through diffusive flux processes. Long-term performance is a major concern if this alternative is considered as a stand alone remedy without some source removal.
3. Upland soils, Table 1:
 - a. Alternative 2. In the March 15, 2012 meeting, it was determined that EPA will require additional support documentation to prove the feasibility of low occupancy remediation for upland soils. Occupancy for any proposed low occupancy area by any potential individual must be less than an average of 6.7 hours per week. Please be sure this information is included for further consideration of this alternative. In addition, any uplands soils subject to future storm erosion must meet a back-calculated concentration that will be protective of the EDD remedy.

- b. Alternatives 3 and 4: The 61(c) Risk-Based Disposal alternative does not rely on the 61(a) cleanup levels, as expressed under the General Description. Rather, it is a risk-based alternative in which either a forward risk assessment is conducted, or site-specific risk-based cleanup values are calculated. In addition, any uplands soils subject to future storm erosion must meet a back-calculated concentration that will be protective of the EDD remedy. Once determined, Amtrak will be able to evaluate the best cost-effective remedial alternatives in compliance with TSCA and HSCA regulations, to ensure that the criterion is not exceeded. Please be aware that it is unlikely that the proposed no excavation scenario will be an acceptable risk-based remedy for upland soils with gross PCB contamination (e.g. roundhouse area with PCB soil concentrations up to more than 1,000 ppm.), so these alternatives need to be revised accordingly.
4. If the proposed High Speed Rail Facility becomes part of Amtrak's final site plans, the approach of multiple scenarios with high and low occupancy alternatives and protection of the EDD remedy for all erodible upland soils seem to be an appropriate remedial approach. The soils underlying the new building can be remediated to the high occupancy 61(a) standard, since these soils would not be subject to stormwater erosion under the foundation of the new building. The approach of multiple scenarios can also be used for the no-building option, as stated before.

In regards to the proposed timeframe for deliverables, the agencies accept the revised timeframe. No extension to the September 30, 2013 date for the submission of the final RI/FFS report will be granted.

Please contact me if you have any questions in regards to this letter.

Sincerely,



Wilmer Reyes
Project Manager

WMR: tlw; WMR13006.doc; DE 0266 II B 4

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